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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,477	01/12/2001	Hirofumi Kawamura	203843US6	1740

7590 11/19/2003

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EXAMINER
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SHIN, CHRISTOPHER B

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 11/19/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/759,477

Applicant(s)

KAWAMURA ET AL.

Examiner

Christopher B Shin

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The Amendment received August 22, 2003 has been entered and carefully considered. Claims ~~10~~<sup>19</sup>-20 are pending in the application.

#### ***Claim Rejections - 35 USC § 112***

2. Claims 3-4 & 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 3, line 3, the intended meaning of the phrase "terminal control function optimal" is unclear from the context of the claim.

b. In claim 9, lines 5, 6, 10 & 12 the phrase "terminal control apparatus" lacks proper and clear antecedent basis; line 8, the phrase "terminal device control functions selected and provided from the terminal control apparatus" lacks and proper and functional antecedent basis. There were no control functions selected and provided from the terminal control apparatus. The same applies to claims 11

#### ***Response to Arguments***

3. Applicant's arguments filed August 22, 2003 have been fully considered but they are not persuasive. On pages 11-12, the applicant argued that the examiner's 103 art rejection did not meet the requirements in 37 CFR 1.104(c)(2). The examiner strongly disagrees with the applicant's argument without clear support. In addition, the examiner has modified the following 103 art rejection to respond to the applicant's argument.

For the above reasons, the examiner maintains the art rejection as follows.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belotserkovskiy et al. (6,453,210).

i. In Columns 5-12 & the respective drawing section, of the Belotserkovskiy reference teaches all of the basic claimed limitations as follows:

Claim 1 Belotserkovskiy (fig 1)

- terminal control apparatus
  - feature of (11, 14, 18, 19)
- terminal device
  - feature of (31)
- communication means for performing communication between the terminal device and the terminal control apparatus
  - feature of (HUB/SERVER & OTHER SERVER(S))
- control means for controlling the terminal device
  - feature of the description of (ICA) in combination with (11,14,16,18,19, and OTHER SERVER(S) & SERVERS/HUB), Columns 5-12
- personal user data peculiar to a separate user terminal
  - feature of (16) which develop and add new recipes for new cast parts, see also column 6, lines 40-60
- by using a terminal control function that accords with the terminal device and personal user data peculiar to a separate user terminal which is communicating with the apparatus through the communication means
  - feature of the description of (ICA) in combination with (11,14,16,18,19 and OTHER SERVER(S) & SERVERS/HUB), Columns 5-12

Claim 2 Belotserkovskiy (fig 1)

- the control means selects an optimal one of plural available terminal control means for the terminal device, and performs the optimal terminal control function selected, thereby to control the terminal device
  - feature of (ICA, DDE, SQL,, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-6

Claim 3 Belotserkovskiy (fig 1)

- control means comprises selection means for selecting the optimal terminal control function, in accordance with terminal information that represents terminal device type and terminal device capabilities, and function-performing means for performing the optimal terminal control function selected by the selection means

-feature of (ICA, DDE, SQL, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-6

Claim 4

Belotserkovskiy (fig 1)

- function-performing means comprises function control means for controlling various function units of the terminal device, and the function control means controls the functions corresponding to various function units in accordance with the terminal capacity data contained in the terminal information

-feature of (ICA, DDE, SQL, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-6

Claim 5

Belotserkovskiy (fig 1)

- wherein information is received from and transmitted to the terminal device through a terminal control system that operates regardless of the type of the terminal device present

-feature of (ICA, DDE, SQL, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-6

Claim 9

Belotserkovskiy (fig 1)

- terminal device having various function units

- feature of (31)

- communication means for performing communication between the terminal device and the terminal control apparatus

- feature of (HUB/SERVER & OTHER SERVER(S)) communication between (31) and (11,14,16,17,18,19)

- control means for transmitting terminal information to the terminal control apparatus and for controlling the function units to perform specific processes in accordance with terminal device control functions selected and provided from the terminal control apparatus responsive to the terminal information received at the terminal control apparatus

-feature of (31) having (PLCs) communicating between (ICA, DDE, SQL, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-6

- wherein said terminal information indicates what type of terminal device is communicating with the terminal control apparatus and capabilities of the terminal device communicating with the terminal control apparatus

-feature of (ICA, DDE, SQL, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-6, and in column 8, lines 28-29 recognizes the different types of machine can be controlled by ICA via PLCs

Claim 10 Belotserkovskiy (fig 1)

- wherein the control means comprises information-storing means for storing the terminal information

- feature of PLC's memory (13,21,22)

- information-transmitting means for acquiring the terminal information from the information-storing means and transmitting the acquired terminal information to the terminal control apparatus and function-performing means for causing the function units to perform the specific processes

- feature of PLCs and its memory (13,21,22) that are utilized to control all of the parts of (31,41,51) and also in communication with (ICA, DDE, SQL, MMI) in combination with (11, 14, 16, 18, 19 and OTHER SERVER(S) & SERVER/HUB) and database that maintains & provides constant updated data and status information for best possible performances, See columns 5-12

ii. As for apparatus claims 1-5 & 9-10, the teachings of the Belotserkovskiy reference teaches all of the basic claimed limitations that are substantially identical to the claimed invention, due to the slight difference in actual application (the claimed invention is not specifically directed to casting processing). However, the Belotserkovskiy reference does teach all of the equivalent limitations of the claimed invention that are substantially identical. It would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of Belotserkovskiy for the reasons stated above.

iii. It is noted that 1) claims 6-8, 11-12 & 2) claims 13-20 respectively claims Method version (1) & Program version(2) that are functionally & substantially identical to the above apparatus claims. In addition, it is also noted that the above noted claims sets are NOT

separately patentable from the detailed teachings of the apparatus claims 1-5 & 9-10; therefore, the teachings of the apparatus claims are similarly applied.

iv. If the applicant believes that the Method & Program version claims are separately & distinctively patentable from the apparatus claims, then the Method & Program version claims should be canceled and filed separately from this application, respectively.

### *Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. **Any Response To This Action Should Be Mailed To:**

**If The Action Is Non-Final**

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**or faxed to:**

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**Hand-delivered responses should be brought to**  
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**Any Other Telephone Communication Should Be Directed To**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Shin whose telephone number is (703) 305-9658. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:00 PM.

Christopher B. Shin  
November 16, 2003

*Christopher B. Shin*  
**PRIMARY EXAMINER**  
**ART UNIT 2182**

